45 projects allowed computing time on European supercomputing network DEISA

Some 45 research projects have been awarded 30 million hours of computing time on Europe's most powerful supercomputers by the Distributed European Infrastructure (DEISA) as part of the DEISA Extreme Computing Initiative (DECI). The infrastructure, funded under the EU's Sixth ...

Some 45 research projects have been awarded 30 million hours of computing time on Europe's most powerful supercomputers by the Distributed European Infrastructure (DEISA) as part of the DEISA Extreme Computing Initiative (DECI). The infrastructure, funded under the EU's Sixth Framework Programme (FP6), will now allow those projects to run operations or simulations that require high-performance computing (HPC) resources.

DEISA, which comprises a number of leading national supercomputers in Europe interconnected with a high bandwidth (10Gigabytes/second), point-to-point network, launched DECI in 2005. A call for extreme computing proposals is published every year in spring, with the 2007 call receiving an overwhelming response of over 60 proposals, the organisation claims, showing that there is 'the need for a persistent European HPC ecosystem'. In 2005 and 2006, DEISA received an average of 40 to 50 proposals. More than 50 projects were awarded computing time over the two years.

'DECI was created and supported as the right instrument to enhance DEISA's impact on Europe's competitiveness in science and technology,' explains project coordinator Victor Alessandrini from the French Institute of Development and Resources in Computer Sciences (CNRS-IDRIS).

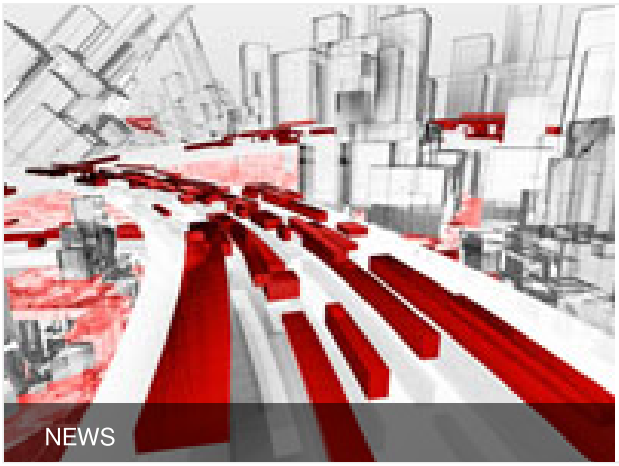
One of the projects that has already benefited from the scheme is the German-British

POLYRES project, which was the first to verify a particular physical model for the initial steps of vesiculation - or blistering - in cells: Using large-scale computer simulations, the project found that when proteins bind to cell membranes and bend them, they can attract each other indirectly due to the membrane deformations they cause. If enough proteins are available, this may lead to the membrane folding in, a process also called membrane invagination. POLYRES, thus, proved that there are membrane mediated interactions, a mechanism which physicists have been investigating for two decades.

This year's selection of 45 projects covers major areas of science, including materials science (12 projects), astro sciences (eight projects), engineering (eight projects), life sciences (eight projects), earth sciences (four projects), plasma physics (three projects), and informatics (two projects). The projects to be supported involve scientists from 14 different European countries and collaborators from three more continents.

For the first time, as many non-DEISA European countries (Austria, Poland, Portugal, Romania, Sweden, Switzerland, and Ukraine) have been involved as countries with DEISA site(s) (Finland, France, Germany, Italy, the Netherlands, Spain, and UK). From outside Europe, scientists from Canada, US, Brazil, Chile and Israel collaborate.

Related articles



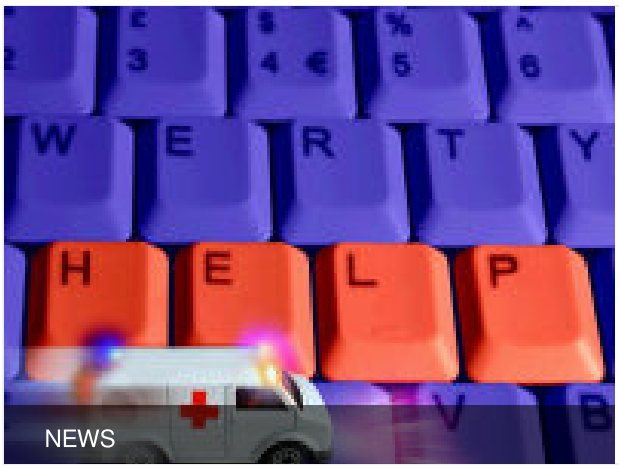
Europe keeps strengthening the superhighway

24 June 2008

NEWS

UK's supercomputer HECToR goes on line

18 January 2008



NEWS

Supercomputing grids close ranks to meet medical challenge

14 December 2007

NEWS

PRACE preparatory project to be launched

12 November 2007

NEWS

Computational modelling allows insights into cell membrane fusion

6 November 2007

POLICY MAKING AND GUIDELINES

GÉANT2 helps maximise Europe's supercomputing resources

18 June 2007

Last update: 5 November 2007

Permalink: https://cordis.europa.eu/article/id/28630-45-projects-allowed-computing-time-on-european-supercomputing-network-deisa